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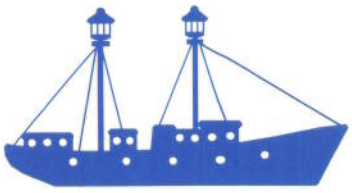
ENVIRONMENTAL & LAND-USE CONSULTANTS



October 2, 2012

Ms. Kimberly Tisa
USEPA New England, Region 1
5 Post Office Square – Suite 100
Boston, Massachusetts 02109-3912

Re: Risk-Based Approach Removal of PCB Containing Caulk
Commercial Office Building
130 Bishop Allen Drive
Cambridge, Massachusetts
Lightship Engineering Ref. No. 532.72.2

Dear Ms. Tisa:

On behalf of Intercontinental Real Estate Corporation, Lightship Engineering, LLC, submits to the United States Environmental Protection Agency, a *Risk-Based Approach* in connection with the above-referenced Site:

If you have any questions regarding the *Risk-Based Approach*, please contact either Brian LaPierre or Timothy Condon at (508) 830-3344, extensions 130 and 120, respectively.

Very truly yours,

Lightship Engineering, LLC

Brian LaPierre, P.E.
Senior Project Manager

Timothy Condon, P.E., LSP
President

cc: Mr. Scott Kelly, Intercontinental Real Estate Corporation

LIGHTSHIP
ENGINEERING

ASSESSMENT AND REMEDIATION • CIVIL ENGINEERING • ENERGY MANAGEMENT • WATER AND WASTEWATER MANAGEMENT • PERMITTING

RISK-BASED APPROACH REMOVAL OF PCB CONTAINING CHALK

Commercial Office Building
130 Bishop Allen Drive
Cambridge, Massachusetts

(Lightship Engineering Project No. 532.72.2)

October 2, 2012

Prepared for:

Intercontinental Real Estate Corporation
1270 Soldiers Field Road
Boston, Massachusetts 02135-1003

Prepared by:

Lightship Engineering, LLC
39 Industrial Park Road, Unit C
Plymouth, Massachusetts, 02360

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1.0 INTRODUCTION

On behalf of Intercontinental Real Estate Corporation ("Intercontinental"), Lightship Engineering, LLC ("Lightship Engineering") has prepared this *Risk-Based Approach* in connection with the investigation and proposed abatement of window caulking containing polychlorinated biphenyls ("PCBs") at the commercial building located at 130 Bishop Allen Drive in Cambridge, Massachusetts (the "Site"). A Site Locus Map is provided as Figure 1-1, Appendix A.

1.1 CONCEPTUAL SITE MODEL

The Site building is a five-story commercial building with a basement. The basement level is used for storage and building operation and/or maintenance activities. As part of a building renovation plan that includes replacement of existing windows, samples of window and door caulking were collected from select locations that were submitted to an analytical laboratory for PCBs (Method 8082, Extraction Method 3540C) analysis. Total PCB concentrations were reported between non-detect (less than one milligram per kilogram ["mg/kg"]) to 3,750 mg/kg. With respect to specific Aroclors, elevated PCB concentrations were reported for Aroclors 1248, 1254 and 1260, as set forth in Table 1-1, Appendix B.

Pursuant to 40 CFR 761.3, *Excluded PCB Products* includes legally manufactured products with PCB concentrations less than 50 mg/kg. By definition, caulking with PCB concentrations of 50 mg/kg or greater are not *Excluded PCB Products* pursuant to 40 CFR 761.20(a)(1). Therefore, caulking with PCB concentrations equal to or greater than 50 mg/kg will be removed and disposed of off-Site. PCBs concentrations were reported between non-detect (less than one mg/kg) to 3,750 mg/kg, as set forth in Table 1-1, Appendix B and summarized below.

- Total PCB concentrations in samples collected from black caulking at the Site had total PCB concentrations less than 50 mg/kg. Therefore, pursuant to 40 CFR 761.20(a)(1), removal of the black caulking is not required.
- Total PCB concentrations exceeding 50 mg/kg were reported in five out of the seven white caulking samples. Pursuant to 40 CFR 761.20(a)(1) , the white caulking with total PCBs greater than 50 mg/kg will be removed and disposed of off-Site at a permitted facility.
- Total PCB concentrations greater than 50 mg/kg were reported in 10 of the 13 samples of grey caulking submitted for laboratory analysis. Pursuant to 40 CFR 761. 20(a)(1), the grey caulking with total PCBs greater than 50 mg/kg will be removed and disposed of off-Site at a permitted facility.

Based upon a visual inspection, the caulking (both grey and white) PCB concentrations less than 50 mg/kg did not appear distinguishable from the caulking with PCB concentrations

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greater than 50 mg/kg. Therefore, for the purpose of this Risk-Based Approach, all white and gray window caulking in the building will be assumed to have a total PCB concentration greater than 50 mg/kg, unless otherwise documented.

1.2 SUMMARY OF PROPOSED ABATEMENT ACTIVITIES

With respect to abatement of the PCB-containing caulk, the windows and associated metal framing will be removed by hand using a combination of interior and exterior methods. The exterior work will be conducted using boom lifts. A heavy layer of tack paper will be placed on the interior and exterior sides of the window. The glass will then be broken and will be transported off-Site for disposal as construction and demolition ("C&D") debris. The framing, caulk and remaining glass located within the window frame will be loaded into a 40 cubic yard closed lined, lockable container (the "waste container") stored on-Site pending off-Site transport and disposal.

Caulking will be removed from the adjacent concrete and around the concrete mullions and sills to a single layer surface and the concrete will then sealed with SQIL216 Optically Clear 2-Part Encapsulation material. Upon completion of the concrete encapsulation, wipe samples will be collected from approximately 50% of the sealed concrete areas and the samples will be submitted to a Commonwealth of Massachusetts certified analytical laboratory for PCBs analysis (Method 3540C/8082). Upon receipt of favorable analytical results, the new window frames will then be installed over the sealed concrete to provide additional protection.

Select caulking samples were also submitted for asbestos analysis and, based upon the laboratory analytical results, select samples had elevated levels of asbestos. As a result, removal activities will also be conducted consistent with Commonwealth of Massachusetts Department of Occupational Safety ("MassDOS") regulations (453 CMR 6.00).

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2.0 BUILDING MATERIALS CHARACTERIZATION

Characterization of caulking was generally conducted throughout the building and sampling locations were based upon visual consistency of the caulking materials. If necessary, additional sampling may be conducted to confirm that conditions in un-sampled areas are consistent with existing data. Based upon existing data and assumptions set forth in this Risk-Based Approach, Lightship Engineering does not anticipate significant differences in the nature of the caulking present throughout the building.

2.1 CHARACTERIZATION SAMPLE COLLECTION

A summary of the sample collection and laboratory analysis is set forth below.

2.1.1 Sample Collection Methods

On January 11 and 12, 2012, Lightship Engineering collected samples of representative caulking on the exterior portions of the building using a mechanical lift. Prior to sample collection, Lightship Engineering conducted a visual inspection of caulking at each window on each of the five floors of the building to assess the nature and similarity of the caulking. Based upon information provided by Intercontinental, the windows are original to the building, which was constructed in the 1960s.

Exterior Caulking Sampling

The caulking on the exterior portions of the building consisted of primarily white and grey caulking, with some black caulking at select locations. The caulking generally appeared in good condition and appeared to be non-friable. Based upon the visual inspection, the caulking on the exterior portion of the windows appeared consistent throughout the building. Therefore, Lightship Engineering collected a representative sample of approximately five grams of caulking from the windows on each floor and on each of the four sides of the building. Lightship Engineering also collected samples of visually similar caulking along door frames at the front and rear entrances to the building. The samples were placed into laboratory provided sample jars and submitted to a Commonwealth of Massachusetts certified analytical laboratory for PCBs (Method 8082, Extraction Method 3540C) analysis. The laboratory analytical results are summarized in Table 1-1, Appendix B and in Section 2.1.2 below. The laboratory analytical data package is provided at Appendix C.

Interior Caulking Sampling

On the interior of the building, the long, vertical windows on floors two through four were primarily sealed with a grey caulking. The windows on the 5th floor were sealed with white caulking that appeared similar to the white caulking observed on the exterior of the building. Some grey caulking was noted along the frames of the sliding glass doors leading to the 5th floor

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balcony. Based upon a visual inspection, the caulking on the interior portion of the windows appeared consistent. Therefore, Lightship Engineering collected a representative sample of approximately five grams of caulking from the windows on floors two through four where grey caulking was observed. Samples were also collected from white window caulking observed on the 5th floor and samples were also collected from the caulking observed along the sliding glass door. The samples were collected in the manner set forth above and were submitted to a Commonwealth of Massachusetts certified analytical laboratory for PCBs (Method 8082, Extraction Method 3540C) analysis. The laboratory analytical results are summarized in Table 1-1, Appendix B and in Section 2.1.2 below. The laboratory analytical data package is provided at Appendix C.

2.1.2 Laboratory Analytical Results

As set forth in Table 1-1, Appendix B, total PCB concentrations ranged between non-detect and 3,750 milligrams per kilogram ("mg/kg"). The range of PCBs detected in the various types of caulk is summarized below.

Caulking Material	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)
White	Non-Detect (<1)	919
Grey	3	3,750
Black	3	12

Examples of the caulking materials are provided in Figure 2-1 and 2-2, Appendix A. The laboratory analytical data package is provided as Appendix C.

2.2 DATA USEABILITY ASSESSMENT

As set forth above, all grey and white caulking is conservatively assumed, for the purpose of this SIP, to have PCB concentrations greater than 50 mg/kg. Therefore, the usability of the analytical data for the grey and white caulking is considered appropriate for the intended use.

With respect to the black caulking, concentrations were all well below the 50 mg/kg threshold and, with the exception of the recovery of one surrogate in one sample, the surrogate recoveries were all within the acceptable range. Therefore, the usability of the analytical data for the black caulking is considered appropriate for the intended use.

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3.0 PCB CAULKING ABATEMENT ACTIVITIES

The proposed abatement activities are set forth below.

3.1 ABATEMENT PLAN

Renovations at the Site will be conducted floor by floor and are anticipated to begin with the fifth floor. As set forth above, the windows and associated metal framing will be removed by hand using a combination of interior and exterior methods. The exterior work will be conducted using boom lifts. The boom lifts will be prepped with two layers of 6-mil, fire rated polyethylene sheets. The double-layer sheeting will be installed with an extension polyethylene sheeting at the base of the boom platform. The bib extension will be taped to the building during the removal of caulking to prevent caulking from falling to the ground.

Once the boom lift is in place, a heavy layer of tack paper will be placed on the interior and exterior sides of the window. The glass will then be broken and will be transported off-Site for disposal as construction and demolition debris. The framing, caulk and remaining glass will be loaded into a 40 cubic yard closed lined, lockable container (the "waste container") and temporarily stored on-Site. The PCB waste will be transported off-Site for disposal as set forth in Section 3.3.

The building owner may select to re-use the metal window frames on the fifth and first floors. In the event the framing is reused, the removal procedures will be consistent with the method set forth above. Once the framing has been removed, remaining glass and caulking will be removed from the frame using blade scrapers and placed in labeled 55-gallon drums or in the waste container. Each metal frame will be double washed and/or rinsed, consistent with the USEPA's *Wipe Sampling and Double Wash/Rinse Cleanup* method dated April 18, 1991. One wipe sample will be collected from each of the cleaned window frames consistent with 40 CFR 761.123 and will be submitted to a Commonwealth of Massachusetts certified analytical laboratory for PCBs analysis (Method 3540C/8082). Assuming PCB concentrations are below 1 microgram per 100 square centimeters ("ug/100cm^2"), the window framing will be re-used at the Site. The frames will be cleaned until favorable wipe samples are obtained or the frames will be disposed as PCB, as set forth in Section 3.3.

Caulking will be removed from the adjacent concrete and around the concrete mullions and sills to a single layer surface using various cutting tools, including: an electric caulking cutter to reach deeper caulking; a 5-in-1 tool designed to dig-in and remove recessed caulking; and, a razor scraper to remove caulking close to the surface. Upon removal of the caulking, concrete will then sealed with SQIL216 Optically Clear 2-Part Encapsulation silicone coating (the "concrete sealant"). A copy of the concrete sealant Technical Data Sheet is provided as Appendix D. Prior to the application of the concrete sealant and after the removal of the windows and caulk from the concrete, Lightship Engineering will collect concrete samples from approximately 10% of the window openings (estimated to be 725 windows, therefore

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3.5 SITE RESTORATION

The removed windows will be replaced with new windows and, as set forth above, sealed concrete will be covered with the concrete sealant and new window frames.

3.6 RECORDKEEPING AND DOCUMENTATION

The following recordkeeping and documentation activities will be conducted in connection with the abatement activities.

3.6.1 Field Notes

A daily log of on-Site activities will be maintained and will include:

- Summary of daily health and safety meetings;
- Field procedures and observations;
- Removal, abatement, containment, and decontamination progress;
- Sample locations with selection criteria, samples collected, analyses performed, sample handling;
- Health and safety monitoring activities and data;
- Estimate of wastes generated and stored; and
- Waste transportation summaries, if applicable.

3.6.2 Photographs

A daily photograph log will be generated of activities such as removal and abatement work, containment structures, decontamination, sampling, and waste handling and storage.

3.6.3 Transport and Disposal Documentation

Manifests and/or bills of lading for the transportation, treatment, and disposal of regulated waste materials and certifications of the treatment of the wastes, if necessary, will be obtained from the transporter and from the treatment and/or disposal facility. Copies of these forms will be included in the abatement report, and records will be maintained consistent with 40 CFR 761 Subpart K (PCB Waste Disposal Records and Reports).

3.6.4 Abatement Completion Report

An abatement report will be prepared upon completion of remedial activities that will include the following information:

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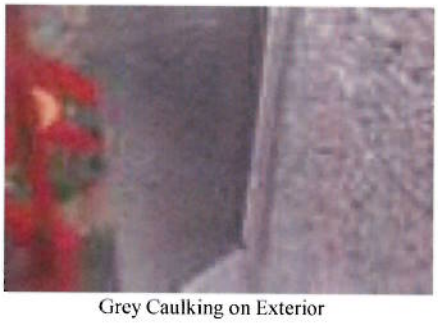
Client	Project		
Intercontinental Management Corp. 1270 Soldiers Field Road Boston, Massachusetts 02135	Commercial Property 130 Bishop Allen Drive Cambridge, Massachusetts 02139	FIGURE 1 Locus Map	LIGHTSHIP ENGINEERING ENVIRONMENTAL & LAND-USE CONSULTANTS 39 Industrial Park Road • Unit C • Plymouth, Massachusetts 02360 • Phone:(508) 830-3344 • Fax: (508) 830-3360
Source: Bing Maps			**Date:** 1/23/2012 — **Drawn by:** TC — 532.72.1
P:\Projects\532 - Intercontinental\532.72 - Bishop Allen, Cambridge\Letter Report\Figures.dwg			**Sheet No.** 1 of 1 — **Scale:** N.T.S.

White Caulking
5th Floor Window

Grey Caulking on Top of
Concrete Structure

Grey Caulking as Base of
Concrete Structure



Grey Caulking on Exterior

Grey Caulking on Interior
5th Floor

Grey and White Caulking on
Sliding Door Frame
5th Floor

Grey Caulking on Interior Window

Grey Caulking on Interior
2nd Floor

White Caulking
5th Floor Window

Grey Caulking on Interior
2nd Floor

Client	Project
Intercontinental Management Corp. 1270 Soldiers Field Road Boston, Massachusetts 02135	Commercial Property 130 Bishop Allen Drive Cambridge, Massachusetts 02139

Source:

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FIGURE 2-2
Examples of Caulking in Contact with Building Materials

LIGHTSHIP ENGINEERING
ENVIRONMENTAL & LAND-USE CONSULTANTS

Date: 1/23/2012	Drawn by: TC	532.72.1
Sheet No. 1 of 1	Scale: N.T.S.	

Table 1-1
PCB Concentrations in Caulking
(mg/kg)

	Sample ID.	LECSE-1.31 Black	LECSE-5.57 Black	LECSS-1.7 Black	LECSS-5.4 Black	LECSW-5.37 Black	LECSN-1.24 Black (Brick)	LECSN-5.2 Black	LECSW-5.66.3 Grey/Black (Door)	LECSS(I)-5.18 White (Interior)	LECSN-3.2 White	LECSE-4.17 White	LECSW-1.37 White (Door)	LECSW-3.22 White	LECSS-4.3 White	LECSE(I)-4.40 White (Interior)
PCB Cogener	Aroclor 1016	0.58 U	0.6 U	0.21 U	0.57 U	0.41 U	1.07 U	0.12 U	1.31 U	11.8 U	0.29 U	5.47 U	248 U	7.89 U	8.6 U	3.9 U
	Aroclor 1221	0.58 U	0.6 U	0.21 U	0.57 U	0.41 U	1.07 U	0.12 U	1.31 U	11.8 U	0.29 U	5.47 U	248 U	7.89 U	8.6 U	3.9 U
	Aroclor 1232	0.58 U	0.6 U	0.21 U	0.57 U	0.41 U	1.07 U	0.12 U	1.31 U	11.8 U	0.29 U	5.47 U	248 U	7.89 U	8.6 U	3.9 U
	Aroclor 1242	0.58 U	0.6 U	0.21 U	0.57 U	0.41 U	1.07 U	0.12 U	1.31 U	11.8 U	0.29 U	5.47 U	248 U	7.89 U	8.6 U	17.1
	Aroclor 1248	4.28	7.26	0.14 U	4.33	5.08	7.8	0.78	6.87	7.87 U	0.19 U	**92.4**	**919**	98.9	68	11.9
	Aroclor 1254	2.06	3.34	4.26	2.28	5.07	2.28	0.89	10.7	11.8 U	0.29 U	5.47 U	248 U	7.89 U	8.6 U	24
	Aroclor 1260	0.6	1.65	3.2	1.89	2.32	0.86	0.9	0.87 U	7.87 U	0.19 U	3.65 U	165 U	5.26 U	5.73 U	2.6 U
	Aroclor 1262	0.19 U	0.2 U	0.07 U	0.19 U	0.14 U	0.36 U	0.04 U	0.44 U	3.94 U	0.1 U	1.82 U	82.6 U	2.63 U	2.87 U	1.3 U
	Aroclor 1268	0.19 U	0.2 U	0.07 U	0.19 U	0.14 U	0.36 U	0.04 U	0.44 U	3.94 U	0.1 U	1.82 U	82.6 U	2.63 U	2.87 U	1.3 U
	Total PCBs	7	12	7	9	12	11	3	18	ND	ND	92	919	99	68	53

	Sample ID.	LECSE-2.86 Grey	LECSE-3.2 Grey	LECSS-2.10 Grey	LECSS-3.12 Grey	LECSW-2.12 Grey	LECSW-4.90 Grey	LECSN-2.14 Grey	LECSN-4.12 Grey	LECSW-5.66.1 Lt. Grey (Door)	LECSW-5.66.2 Grey (Door)	LECSS(I)-4.24 Grey (Interior)	LECSW(I)-4.74 Grey (Interior)	LECSN(I)-4.4 Grey (Interior)
PCB Cogener	Aroclor 1016	29.1 U	29.7 U	26.5 U	23.6 U	26.5 U	0.23 U	30 U	0.3 U	0.23 U	291 U	28.8 U	5.77 U	5.13 U
	Aroclor 1221	29.1 U	29.7 U	26.5 U	23.6 U	26.5 U	0.23 U	30 U	0.3 U	0.23 U	291 U	28.8 U	5.77 U	5.13 U
	Aroclor 1232	29.1 U	29.7 U	26.5 U	23.6 U	26.5 U	0.23 U	30 U	0.3 U	0.23 U	291 U	28.8 U	5.77 U	5.13 U
	Aroclor 1242	29.1 U	29.7 U	26.5 U	23.6 U	26.5 U	0.23 U	30 U	0.3 U	0.23 U	291 U	28.8 U	5.77 U	5.13 U
	Aroclor 1248	**269**	**647**	**396**	**380**	**288**	0.15 U	**253**	0.63	5.03	**1270**	19.2 U	**73**	30.1
	Aroclor 1254	29.1 U	29.7 U	26.5 U	23.6 U	26.5 U	1.68	30 U	0.58	4.8	**2480**	**88.3**	47.8	27.4
	Aroclor 1260	35.4	**54.9**	48.7	48.2	42.1	1.36	38.5	0.4	0.15 U	194 U	19.2 U	3.85 U	3.42 U
	Aroclor 1262	9.71 U	9.9 U	8.85 U	7.87 U	8.85 U	0.07 U	10 U	0.1 U	0.08 U	97.1 U	9.62 U	1.92 U	1.71 U
	Aroclor 1268	9.71 U	9.9 U	8.85 U	7.87 U	8.85 U	0.07 U	10 U	0.1 U	0.08 U	97.1 U	9.62 U	1.92 U	1.71 U
	Total PCBs	304	702	445	428	330	3	292	2	10	3,750	108	121	58

Notes:

0.41 U - Concentration reported below analytical reporting limite of 0.41 mg/kg.

7.8 - Reported concentration of PCB cogener (mg/kg).

253 - Reported concentration of specific PCB cogener exceeds USEPA action threshold of 50 mg/kg.

53 - Total PCB concentration exceeds USEPA action threshold of 50 mg/kg.

54 - Total PCB concentration exceeds USEPA action threshold of 500 mg/kg.

ND - PCBs reported at non-detectable levels.

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L1200581
Client:	Lightship Engineering 39 Industrial Park Road Unit C Plymouth, MA 02360
ATTN:	Tim Condon
Phone:	(508) 830-3344
Project Name:	130 BISHOP ALLEN DRIVE
Project Number:	532.72.1
Report Date:	01/19/12

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581
Project Number: 532.72.1 **Report Date:** 01/19/12

Case Narrative (continued)

analysis.

L1200581-21 has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the sample matrix.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The surrogate recovery for L1200581-01 is outside the individual acceptance criteria for Decachlorobiphenyl (29%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

The surrogate recoveries for L1200581-02, -03, -04, -07, -08, -09, -11, -12, -13, -16, -17, -21, and -23 through -28 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (all 0%) due to the dilutions required to quantitate the samples. Re-extraction was not required; therefore, the results of the original analyses are reported.

L1200581-18: The internal standard (IS) response for 1-Bromo-2-nitrobenzene was above the acceptance criteria on the confirmation column; however, the sample was not re-analyzed due to obvious interferences. Since the IS response was above method criteria, all associated compounds are considered to have a potentially low bias. Due to the high IS response, the surrogate recoveries for 2,4,5,6-Tetrachloro-m-xylene (10%) and Decachlorobiphenyl (4%) are below the individual acceptance criteria on the confirmation column.

The surrogate recoveries for L1200581-19 were below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene (9%/9%) and Decachlorobiphenyl (3%/4%); however, re-extraction achieved similar results: 2,4,5,6-Tetrachloro-m-xylene (26%/26%) and Decachlorobiphenyl (24%/22%). The results of both extractions are reported; however, all associated compounds are considered to have a potentially low bias.

The dual column RPD for L1200581-19RE is above the acceptance criteria for Aroclor 1254; however, no obvious column interferences are present. The higher of the two results is reported and qualified with a "P".

The surrogate recoveries for L1200581-20 were below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene (16%/7%) and Decachlorobiphenyl (5%/7%); however, re-extraction achieved similar results: Decachlorobiphenyl (27%/27%). The results of both extractions are reported; however, all associated compounds are considered to have a potentially low bias.

ORGANICS

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-01 D	Date Collected:	01/10/12 10:30
Client ID:	LECSE-1.31	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 15:10	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	584	--	5
Aroclor 1221	ND		ug/kg	584	--	5
Aroclor 1232	ND		ug/kg	584	--	5
Aroclor 1242	ND		ug/kg	584	--	5
Aroclor 1254	2060		ug/kg	584	--	5
Aroclor 1262	ND		ug/kg	194	--	5
Aroclor 1268	ND		ug/kg	194	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	38		30-150
Decachlorobiphenyl	**29**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	34		30-150
Decachlorobiphenyl	30		30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-02 D	Date Collected:	01/10/12 09:15
Client ID:	LECSE-2.86	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/17/12 23:16	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	29100	--	10
Aroclor 1221	ND		ug/kg	29100	--	10
Aroclor 1232	ND		ug/kg	29100	--	10
Aroclor 1242	ND		ug/kg	29100	--	10
Aroclor 1254	ND		ug/kg	29100	--	10
Aroclor 1262	ND		ug/kg	9710	--	10
Aroclor 1268	ND		ug/kg	9710	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1
Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-03 D	Date Collected:	01/10/12 08:30
Client ID:	LECSE-3.2	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/17/12 23:30	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	29700	--	10
Aroclor 1221	ND		ug/kg	29700	--	10
Aroclor 1232	ND		ug/kg	29700	--	10
Aroclor 1242	ND		ug/kg	29700	--	10
Aroclor 1254	ND		ug/kg	29700	--	10
Aroclor 1260	54900		ug/kg	19800	--	10
Aroclor 1262	ND		ug/kg	9900	--	10
Aroclor 1268	ND		ug/kg	9900	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-04	D	Date Collected:	01/10/12 08:45
Client ID:	LECSE-4.17		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/13/12 16:30
Analytical Date:	01/18/12 13:21		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	5470	--	50
Aroclor 1221	ND		ug/kg	5470	--	50
Aroclor 1232	ND		ug/kg	5470	--	50
Aroclor 1242	ND		ug/kg	5470	--	50
Aroclor 1254	ND		ug/kg	5470	--	50
Aroclor 1260	ND		ug/kg	3650	--	50
Aroclor 1262	ND		ug/kg	1820	--	50
Aroclor 1268	ND		ug/kg	1820	--	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-05 D	Date Collected:	01/10/12 10:00
Client ID:	LECSE-5.57	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 13:30	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	595	--	5
Aroclor 1221	ND		ug/kg	595	--	5
Aroclor 1232	ND		ug/kg	595	--	5
Aroclor 1242	ND		ug/kg	595	--	5
Aroclor 1248	7260		ug/kg	397	--	5
Aroclor 1254	3340		ug/kg	595	--	5
Aroclor 1262	ND		ug/kg	198	--	5
Aroclor 1268	ND		ug/kg	198	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	92		30-150
Decachlorobiphenyl	72		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	70		30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-06	Date Collected:	01/10/12 15:30
Client ID:	LECSS-1.7	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/16/12 14:20	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	211	--	2
Aroclor 1221	ND		ug/kg	211	--	2
Aroclor 1232	ND		ug/kg	211	--	2
Aroclor 1242	ND		ug/kg	211	--	2
Aroclor 1248	ND		ug/kg	141	--	2
Aroclor 1260	3200		ug/kg	141	--	2
Aroclor 1262	ND		ug/kg	70.4	--	2
Aroclor 1268	ND		ug/kg	70.4	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	69		30-150
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	81		30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-07 D	Date Collected:	01/10/12 12:00
Client ID:	LECSS-2.10	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/17/12 23:44	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	26500	--	10
Aroclor 1221	ND		ug/kg	26500	--	10
Aroclor 1232	ND		ug/kg	26500	--	10
Aroclor 1242	ND		ug/kg	26500	--	10
Aroclor 1254	ND		ug/kg	26500	--	10
Aroclor 1262	ND		ug/kg	8850	--	10
Aroclor 1268	ND		ug/kg	8850	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1
Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-08 D	Date Collected:	01/10/12 11:30
Client ID:	LECSS-3.12	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/17/12 23:59	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	23600	--	10
Aroclor 1221	ND		ug/kg	23600	--	10
Aroclor 1232	ND		ug/kg	23600	--	10
Aroclor 1242	ND		ug/kg	23600	--	10
Aroclor 1254	ND		ug/kg	23600	--	10
Aroclor 1262	ND		ug/kg	7870	--	10
Aroclor 1268	ND		ug/kg	7870	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-09	D	Date Collected:	01/10/12 11:00
Client ID:	LECSS-4.3		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/13/12 16:30
Analytical Date:	01/18/12 17:02		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	8600	--	80
Aroclor 1221	ND		ug/kg	8600	--	80
Aroclor 1232	ND		ug/kg	8600	--	80
Aroclor 1242	ND		ug/kg	8600	--	80
Aroclor 1254	ND		ug/kg	8600	--	80
Aroclor 1260	ND		ug/kg	5730	--	80
Aroclor 1262	ND		ug/kg	2870	--	80
Aroclor 1268	ND		ug/kg	2870	--	80

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-10 D	Date Collected:	01/10/12 10:30
Client ID:	LECSS-5.4	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 13:42	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	568	--	5
Aroclor 1221	ND		ug/kg	568	--	5
Aroclor 1232	ND		ug/kg	568	--	5
Aroclor 1242	ND		ug/kg	568	--	5
Aroclor 1248	4330		ug/kg	379	--	5
Aroclor 1254	2280		ug/kg	568	--	5
Aroclor 1260	1890		ug/kg	379	--	5
Aroclor 1262	ND		ug/kg	189	--	5
Aroclor 1268	ND		ug/kg	189	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	50		30-150
Decachlorobiphenyl	35		30-150
2,4,5,6-Tetrachloro-m-xylene	40		30-150
Decachlorobiphenyl	38		30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-12	D	Date Collected:	01/10/12 13:30
Client ID:	LECSW-2.12		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3580A
Analytical Method:	97,8082		Extraction Date:	01/17/12 18:30
Analytical Date:	01/18/12 00:41		Cleanup Method1:	EPA 3665A
Analyst:	KB		Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	26500	--	10
Aroclor 1221	ND		ug/kg	26500	--	10
Aroclor 1232	ND		ug/kg	26500	--	10
Aroclor 1242	ND		ug/kg	26500	--	10
Aroclor 1254	ND		ug/kg	26500	--	10
Aroclor 1262	ND		ug/kg	8850	--	10
Aroclor 1268	ND		ug/kg	8850	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
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SAMPLE RESULTS

Lab ID:	L1200581-13	D	Date Collected:	01/10/12 12:30
Client ID:	LECSW-3.22		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/17/12 13:00
Analytical Date:	01/18/12 14:57		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/18/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	7890	--	20
Aroclor 1221	ND		ug/kg	7890	--	20
Aroclor 1232	ND		ug/kg	7890	--	20
Aroclor 1242	ND		ug/kg	7890	--	20
Aroclor 1248	98900		ug/kg	5260	--	20
Aroclor 1254	ND		ug/kg	7890	--	20
Aroclor 1260	ND		ug/kg	5260	--	20
Aroclor 1262	ND		ug/kg	2630	--	20
Aroclor 1268	ND		ug/kg	2630	--	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
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SAMPLE RESULTS

Lab ID:	L1200581-15	Date Collected:	01/10/12 12:45
Client ID:	LECSW-5.37	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/17/12 13:00
Analytical Date:	01/18/12 09:52	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/18/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	411	--	1
Aroclor 1221	ND		ug/kg	411	--	1
Aroclor 1232	ND		ug/kg	411	--	1
Aroclor 1242	ND		ug/kg	411	--	1
Aroclor 1248	5080		ug/kg	274	--	1
Aroclor 1260	2320		ug/kg	274	--	1
Aroclor 1262	ND		ug/kg	137	--	1
Aroclor 1268	ND		ug/kg	137	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	91		30-150
Decachlorobiphenyl	93		30-150
2,4,5,6-Tetrachloro-m-xylene	98		30-150
Decachlorobiphenyl	94		30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-16 D	Date Collected:	01/10/12 15:25
Client ID:	LECSN-1.24	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 12:40	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	1070	--	10
Aroclor 1221	ND		ug/kg	1070	--	10
Aroclor 1232	ND		ug/kg	1070	--	10
Aroclor 1242	ND		ug/kg	1070	--	10
Aroclor 1248	7800		ug/kg	714	--	10
Aroclor 1254	2280		ug/kg	1070	--	10
Aroclor 1262	ND		ug/kg	357	--	10
Aroclor 1268	ND		ug/kg	357	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
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SAMPLE RESULTS

Lab ID:	L1200581-17 D	Date Collected:	01/10/12 15:15
Client ID:	LECSN-2.14	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/18/12 00:55	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	30000	--	10
Aroclor 1221	ND		ug/kg	30000	--	10
Aroclor 1232	ND		ug/kg	30000	--	10
Aroclor 1242	ND		ug/kg	30000	--	10
Aroclor 1254	ND		ug/kg	30000	--	10
Aroclor 1262	ND		ug/kg	10000	--	10
Aroclor 1268	ND		ug/kg	10000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-18	Date Collected:	01/10/12 14:45
Client ID:	LECSN-3.2	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/17/12 13:00
Analytical Date:	01/18/12 10:05	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/18/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	291	--	1
Aroclor 1221	ND		ug/kg	291	--	1
Aroclor 1232	ND		ug/kg	291	--	1
Aroclor 1242	ND		ug/kg	291	--	1
Aroclor 1248	ND		ug/kg	194	--	1
Aroclor 1254	ND		ug/kg	291	--	1
Aroclor 1260	ND		ug/kg	194	--	1
Aroclor 1262	ND		ug/kg	97.1	--	1
Aroclor 1268	ND		ug/kg	97.1	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**10**	Q	30-150
Decachlorobiphenyl	**4**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	85		30-150
Decachlorobiphenyl	101		30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-19 RE	Date Collected:	01/10/12 14:30
Client ID:	LECSN-4.12	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/18/12 17:10
Analytical Date:	01/19/12 14:18	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/19/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	300	--	1
Aroclor 1221	ND		ug/kg	300	--	1
Aroclor 1232	ND		ug/kg	300	--	1
Aroclor 1242	ND		ug/kg	300	--	1
Aroclor 1248	630		ug/kg	200	--	1
Aroclor 1260	395		ug/kg	200	--	1
Aroclor 1262	ND		ug/kg	100	--	1
Aroclor 1268	ND		ug/kg	100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**26**	Q	30-150
Decachlorobiphenyl	**24**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**26**	Q	30-150
Decachlorobiphenyl	**22**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-20	Date Collected:	01/10/12 14:00
Client ID:	LECSN-5.2	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/18/12 16:16	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	428	--	4
Aroclor 1221	ND		ug/kg	428	--	4
Aroclor 1232	ND		ug/kg	428	--	4
Aroclor 1242	ND		ug/kg	428	--	4
Aroclor 1248	ND		ug/kg	286	--	4
Aroclor 1254	ND		ug/kg	428	--	4
Aroclor 1260	ND		ug/kg	286	--	4
Aroclor 1262	ND		ug/kg	143	--	4
Aroclor 1268	ND		ug/kg	143	--	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**16**	Q	30-150
Decachlorobiphenyl	**5**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**7**	Q	30-150
Decachlorobiphenyl	**7**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-20	RE	Date Collected:	01/10/12 14:00
Client ID:	LECSN-5.2		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/18/12 17:10
Analytical Date:	01/19/12 14:30		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/19/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	779		ug/kg	78.4	--	1
Aroclor 1254	888		ug/kg	118	--	1
Aroclor 1260	904		ug/kg	78.4	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	33		30-150
Decachlorobiphenyl	**27**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	33		30-150
Decachlorobiphenyl	**27**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-21	D	Date Collected:	01/11/12 13:00
Client ID:	LECSS(I)-5.18		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/13/12 16:30
Analytical Date:	01/18/12 17:15		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	ND		ug/kg	11800	--	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-22	Date Collected:	01/11/12 12:30
Client ID:	LECSW-5.66.1	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 00:15	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	5030		ug/kg	153	--	2
Aroclor 1254	4800		ug/kg	229	--	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	40		30-150
Decachlorobiphenyl	**326**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	41		30-150
Decachlorobiphenyl	**273**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-23	D	Date Collected:	01/11/12 12:40
Client ID:	LECSW-5.66.2		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3580A
Analytical Method:	97,8082		Extraction Date:	01/17/12 18:30
Analytical Date:	01/18/12 12:40		Cleanup Method1:	EPA 3665A
Analyst:	KB		Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	1270000		ug/kg	194000	--	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-24	D	Date Collected:	01/11/12 12:50
Client ID:	LECSW-5.66.3		Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA		Field Prep:	Not Specified
Matrix:	Solid		Extraction Method:	EPA 3540C
Analytical Method:	97,8082		Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 14:58		Cleanup Method1:	EPA 3665A
Analyst:	SH		Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.		Cleanup Method2:	EPA 3660B
			Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1248	6870		ug/kg	873	--	10
Aroclor 1254	10700		ug/kg	1310	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE
Lab Number: L1200581
Project Number: 532.72.1
Report Date: 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-25 D	Date Collected:	01/11/12 11:30
Client ID:	LECSS(I)-4.24	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3580A
Analytical Method:	97,8082	Extraction Date:	01/17/12 18:30
Analytical Date:	01/18/12 01:22	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	01/17/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/17/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1254	88300		ug/kg	28800	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-27 D	Date Collected:	01/11/12 11:50
Client ID:	LECSN(I)-4.4	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 13:54	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	5130	--	40
Aroclor 1221	ND		ug/kg	5130	--	40
Aroclor 1232	ND		ug/kg	5130	--	40
Aroclor 1242	ND		ug/kg	5130	--	40
Aroclor 1260	ND		ug/kg	3420	--	40
Aroclor 1262	ND		ug/kg	1710	--	40
Aroclor 1268	ND		ug/kg	1710	--	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	**0**	Q	30-150
Decachlorobiphenyl	**0**	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE **Lab Number:** L1200581

Project Number: 532.72.1 **Report Date:** 01/19/12

SAMPLE RESULTS

Lab ID:	L1200581-28 D	Date Collected:	01/11/12 12:00
Client ID:	LECSE(I)-4.40	Date Received:	01/11/12
Sample Location:	CAMBRIDGE, MA	Field Prep:	Not Specified
Matrix:	Solid	Extraction Method:	EPA 3540C
Analytical Method:	97,8082	Extraction Date:	01/13/12 16:30
Analytical Date:	01/17/12 12:53	Cleanup Method1:	EPA 3665A
Analyst:	SH	Cleanup Date1:	01/16/12
Percent Solids:	Results reported on an 'AS RECEIVED' basis.	Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/16/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Polychlorinated Biphenyls - Westborough Lab						
Aroclor 1016	ND		ug/kg	3900	--	30
Aroclor 1221	ND		ug/kg	3900	--	30
Aroclor 1232	ND		ug/kg	3900	--	30
Aroclor 1242	17100	P	ug/kg	3900	--	30
Aroclor 1248	11900	P	ug/kg	2600	--	30
Aroclor 1254	24000	P	ug/kg	3900	--	30
Aroclor 1260	ND		ug/kg	2600	--	30
Aroclor 1262	ND		ug/kg	1300	--	30
Aroclor 1268	ND		ug/kg	1300	--	30

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150
Decachlorobiphenyl	0	Q	30-150

Project Name: 130 BISHOP ALLEN DRIVE

Project Number: 532.72.1

Lab Number: L1200581

Report Date: 01/19/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
Analytical Date: 01/18/12 11:47
Analyst: SH

Extraction Method: EPA 3540C
Extraction Date: 01/17/12 13:00
Cleanup Method1: EPA 3665A
Cleanup Date1: 01/18/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 01/18/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 13,15,18,26 Batch: WG514054-1					
Aroclor 1016	ND		ug/kg	58.7	--
Aroclor 1221	ND		ug/kg	58.7	--
Aroclor 1232	ND		ug/kg	58.7	--
Aroclor 1242	ND		ug/kg	58.7	--
Aroclor 1248	ND		ug/kg	39.1	--
Aroclor 1254	ND		ug/kg	58.7	--
Aroclor 1260	ND		ug/kg	39.1	--
Aroclor 1262	ND		ug/kg	19.6	--
Aroclor 1268	ND		ug/kg	19.6	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	127		30-150
Decachlorobiphenyl	128		30-150
2,4,5,6-Tetrachloro-m-xylene	116		30-150
Decachlorobiphenyl	109		30-150

Project Name: 130 BISHOP ALLEN DRIVE

Project Number: 532.72.1

Lab Number: L1200581

Report Date: 01/19/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8082
Analytical Date: 01/19/12 14:42
Analyst: SH

Extraction Method: EPA 3540C
Extraction Date: 01/18/12 17:10
Cleanup Method1: EPA 3665A
Cleanup Date1: 01/19/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 01/19/12

Parameter	Result	Qualifier	Units	RL	MDL
MCP Polychlorinated Biphenyls - Westborough Lab for sample(s): 19-20 Batch: WG514309-1					
Aroclor 1016	ND		ug/kg	118	--
Aroclor 1221	ND		ug/kg	118	--
Aroclor 1232	ND		ug/kg	118	--
Aroclor 1242	ND		ug/kg	118	--
Aroclor 1248	ND		ug/kg	78.7	--
Aroclor 1254	ND		ug/kg	118	--
Aroclor 1260	ND		ug/kg	78.7	--
Aroclor 1262	ND		ug/kg	39.4	--
Aroclor 1268	ND		ug/kg	39.4	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	88		30-150
Decachlorobiphenyl	83		30-150
2,4,5,6-Tetrachloro-m-xylene	90		30-150
Decachlorobiphenyl	92		30-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: 130 BISHOP ALLEN DRIVE
Project Number: 532.72.1

Lab Number: L1200581
Report Date: 01/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 02-03,07-08,11-12,17,23,25 Batch: WG514287-2 WG514287-3								
Aroclor 1016	84		76		40-140	10		30
Aroclor 1260	73		72		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	67		74		30-150
Decachlorobiphenyl	60		58		30-150
2,4,5,6-Tetrachloro-m-xylene	57		70		30-150
Decachlorobiphenyl	44		58		30-150

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Polychlorinated Biphenyls - Westborough Lab Associated sample(s): 19-20 Batch: WG514309-2 WG514309-3								
Aroclor 1016	100		100		40-140	0		30
Aroclor 1260	98		102		40-140	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	92		91		30-150
Decachlorobiphenyl	86		86		30-150
2,4,5,6-Tetrachloro-m-xylene	91		89		30-150
Decachlorobiphenyl	93		93		30-150

Certificate/Approval Program Summary

Last revised January 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NY-DOH.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476-09-1. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^-$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix.

CHAIN OF CUSTODY

PAGE 1 OF 3

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/11/12

ALPHA Job #: L1200581

Client Information

Client: Lightship Engineering LLC
Address: 39 Industrial Park Road
Plymouth, MA 02360
Phone: 508 830-3344
Fax: 830-3360
Email: Tcondon@lightshipengineering.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 130 Bishop Allen Drive
Project Location: Cambridge, MA
Project #: 532.72.1
Project Manager: T. Condon
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: 1/18/12 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MA Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

ANALYSIS: PCB (8082)

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB (8082)	Sample Specific Comments	TOTAL # BOTTLES
60581-1	LECSE - 1.31	1/10/12	1030	CONC	NTS	X		
2	- 2.86		0915			X		
3	- 3.2		0830			X		
4	- 4.17		0845			X		
5	- 5.57		1000			X		
6	LECSS - 1.7		0830			X		
7	- 2.10		1200			X		
8	- 3.12		1130			X		
9	- 4.3		1100			X		
10	- 5.4		1030			X		

Container Type: 4
Preservative: 4

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
Nathaniel T. Slaughter	1/11/12 1350		1/11/12 1350

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

Serial_No:01191217:23

CHAIN OF CUSTODY

PAGE 3 OF 3

ALPHA ANALYTICAL

WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193

MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/11/12

ALPHA Job #: L1200581

Client Information

Client: Lightship Engineering LLC
Address: 39 Industrial Park Road, Plymouth, MA 02360
Phone: 508 830-3344
Fax: -3360
Email: Tcondon@—

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 130 Bishop Allen Drive
Project Location: Cambridge, MA
Project #: 532.72.1
Project Manager: T. Condon
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 1/18/12 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: MA Criteria:

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed. (Note: All *CAM* methods for inorganic analyses require MS every 20 soil samples)

ANALYSIS: PCB (8082)

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	PCB (8082)	Sample Specific Comments	TOTAL # BOTTLES
00581 21	LECSS(i)-5.18	1/11/12	1300	caulk	NTS	X		
22	LECSW-5.66.1	|	1230	|	|	X		
23	5.66.2	|	1240	|	|	X		
24	5.66.3	|	1250	|	|	X		
25	LECSS(i)-4.24	|	1130	|	|	X		
26	LECSW(i)-4.74	|	1140	|	|	X		
27	LECSN(i)-4.4	|	1150	|	|	X		
28	LECSE(i)-4.40	|	1200	|	|	X		

PLEASE ANSWER QUESTIONS ABOVE!

Container Type: A
Preservative: A

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature] T. Shafer	1/11/12 1350	[signature]	1/11/12 1350

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 18-Jan-2010)

Technical Data Sheet

QSil214

Specialty Silicone Coating

Product Description

Quantum Silicones' QSil214 is a median viscosity, two-component, addition cure, silicone elastomer.

Key Features

- Medium viscosity
- Fast cure RT cure
- Low linear shrinkage
- Transparent
- 1:1 A to B mix ratio

Typical Properties

Uncatalyzed Properties		
	"A" Component	"B" Component
Appearance	Transparent	Transparent
Viscosity, cps	4,550	5,200
Specific Gravity	1.00	1.00

Catalyzed Properties	
Mix Ratio	1:1
Pot Life, 25°C	28 minutes
Cure Time	
	30 min @ 150C
Durometer	40
Tensile Strength, psi	650
Elongation, %	150
Thermal Conductivity W/mK	0.18
Refractive Index	1.40
Useful Temperature Range	-50 to 200C

Instructions for use

Mixing

Mix equal parts of "A" and "B" and thoroughly by weight or volume. Once the components are mixed the curing process begins. The pot life of the mixed material is shown under typical properties.

De-aeration

Air trapped during mixing should be removed to eliminate voids in the cured product. Vacuum de-airing may be necessary to completely remove all entrapped air bubbles. To insure proper de-airing, subject the mixed material to 29 inches of mercury.

Storage and shelf life

QSil214 should be stored in the original unopened container at 25C (77F). QSil214 will remain useful for a period of 12 months if stored under those conditions.

Not for Product Specification

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call 1-800-852-3147.

Quantum Silicones
8021 Reycan Rd
Richmond, VA 23237
Phone (804) 271-9010 Fax (804) 271-9055
Customer Service (800)852-3147
www.quantumsilicones.com